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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,919	09/30/2003	Masahiro Yamamoto	088473-0153	7357

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FOLEY AND LARDNER LLP  
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WASHINGTON, DC 20007

EXAMINER
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CHARLES, MARCUS

ART UNIT	PAPER NUMBER
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3682

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/673,919	<b>Applicant(s)</b> YAMAMOTO ET AL.	
	<b>Examiner</b> Marcus Charles	<b>Art Unit</b> 3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9-30-2003</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This is the first action relating to serial application number 10/673,919 filed 09-30-2003.

Claims 1-14 are currently pending.

#### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Drawings***

2. The examiner has accepted the drawing filed with this application as formal drawing.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 13, the term "fixing" render the intended scope of the claim unclear because it is not clear as to what "fixing" is related to, and what is being fixed.

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 5-9 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okahara et al. (5,249,482) in view of Lardy et al. (5,624,348). In claims 1, 5 and 11, Okahara et al. discloses the claimed invention including a shift actuator in the form of a step motor (110) which inherently has different positions corresponding to different shift ratios, the shift actuator is under the control of a control unit (300) for controlling the shift actuator base on the information of the parameters of the transmission via sensors. It is also apparent the shift actuator inherently provides shifting from a first position to a second position corresponding to the target ratio. Okahara et al. also discloses base on the ratio the shift actuator is held at a predetermined position. It is also apparent that the target shift ratio is determined by the predetermined primary or secondary pulley pressure. Okahara et al. fail to disclose an electronic control unit controls the shift actuator from a first position to third position based on the required target shift ratio. Lardy et al. discloses a CVT having a shift actuator controlled by a control electronic control system (6) for ratio control from which maintain a predetermined reduction ratio in response to the motion of the shift actuator. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the CVT of Okahara et al. so as to provide for an ECU to control the control the shift actuator in view of Lardy et al. so as to effectively adjust the pressure conditions in the CVT and increase the smoothness of the change in the transmission ratio thus preventing pressure buildup and to reduce cost.

In claims 2-3 and 5-9 are inherently disclosed by the combination of

Okahara et al. in view of Lardy et al.

In claim 11-13, the method steps are inherently included during the controlling of the CVT of Okahara et al. in view of Lardy et al.

7. Claims 4, 10 and 14 rejected under 35 U.S.C. 103(a) as being unpatentable over Okahara et al. in view of Lardy et al. as applied to claim above, and further in view of Murano et al. (5,042,323). Okahara et al. in view of Lardy et al. fail to disclose the primary pulley pressure is changed in accordance with an oil temperature. Murano et al. discloses a control unit means (ECU) for controlling the primary pressure control valves (44/52) in accordance with the oil temperature so that the clutch is smoothly and effectively operated, the lifetime of the valve is extended and vibration of the vehicle body due to pressure fluctuation in the hydraulic circuit is prevented. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to further modify CVT of Okahara et al. to include the limitation of Murano et al. so that the clutch is smoothly and effectively operated, the lifetime of the valve is extended and vibration of the vehicle body due to pressure fluctuation in the hydraulic circuit is prevented.


### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kato et al. (5,207,617), Kumura et al. (4,736,655), Soga et al. (5,063,816) and JP (63-53355) disclose a CVT having a control unit controlling the shift actuator. JP (09-250631), JP (63-62955) and JP (2001-330118) disclose a CVT in which the transmission ratio is base on the oil temperature.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (571) 272-7101. The examiner can normally be reached on Monday-Thursday 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ridley Richard can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Marcus Charles  
Primary Examiner  
Art Unit 3682  
August 18, 2006